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PRE-APPEAL BRIEF REQUEST FOR REVIEW

	Docket Number (Optional)
	SRIRAM 24-27

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number	Filed
	09/521,730	03/09/2000
on December 22, 2006	First Named Inventor	
Signature _____	SRIRAM	
Typed or printed name _____ John Ligon _____	Art Unit	Examiner
	2616	Toan O. Nguyen

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
        Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
   See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
   (Form PTO/SB/96)

☒ attorney or agent of record. 35,938
   Registration number _____

☐ attorney or agent acting under 37 CFR 1.34.

   Registration number if acting under 37 CFR 1.34 _____

_____
           Signature

John Ligon
        Typed or printed name

732-872-3330
        Telephone number

December 22, 2006
           Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

In the Office Action, independent claims 1, 9, 15 and 28 were rejected under 35 USC §103(a) as being unpatentable over Hayano *et al.* (U.S. Patent No. 5,132,966) in view of Key *et al* (U.S. Patent No. 5,991,272) and further in view of Duault *et al.* (U.S. Patent No. 5,912,894), and, for claims 15 and 28, further in view of Kawase *et al.* (U.S. Patent No. 5,774,455). Applicants respectfully traverse those rejections and request reconsideration by the Examiner. It is noted that, although the Applicants do not agree with the assertions in the Office Action regarding the teaching of secondary reference Kawase, the limitation which that reference is cited as teaching is not regarded by the Applicants as needed to establish patentability over the art, and therefore will not be discussed further herein.

The invention here provides a dynamic call admission methodology that operates at an ATM network edge, and is particularly useful for applications invoking ATM Adaptation Layer Type 2 (AAL2). The dynamic call admission methodology of the invention uniquely makes an admission decision as a function of call type – in particular, that methodology takes into consideration different bandwidth needs for different call types. A key feature of the invention is a recognition that different call types transmitted over a voice circuit have substantially different bandwidth requirements and vary widely in the applicability of statistical multiplexing for a given call type. In the exemplary embodiment described for the invention, call admission is dynamically adapted depending on whether a call using a voice circuit is actually a voice signal, a facsimile signal, or a data signal modulated onto a voice carrier by a modem. A particular feature of the invention is the determination of bandwidth available for admission of voice calls as a function of the number of non-voice calls admitted.

While the primary reference, Hayano, makes note of call admission to its system being carried out according to methods known in the art, the thrust of its teaching is directed to the treatment of calls already admitted – *i.e.*, to the transmission priority to be granted for calls of different categories. Moreover, unlike the call admission methodology disclosed and claimed by the inventors, the methodology of Hayano essential treats voice-channel traffic – to which Applicants methodology is substantially directed -- as a stepchild, receiving no priority and being allocated bandwidth only insofar as total bandwidth is not required for carrying traffic to which Hayano assigns a higher priority. Thus, Applicants submit, Hayano fails both as a

teaching of asserted elements of their claimed invention, and additionally as not being analogous art to that of the invention.

Even if Hayano were accepted as teaching all that is asserted by the Office Action, it is clear, as acknowledged by the Office Action, that if does not teach or suggest the limitations of Applicants' claims respecting (1) "determining an amount of bandwidth available for voice as a function of a number of non-voice admitted calls" and (2) "updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call." To address this deficiency, the Office Action relies on Key as teaching these limitation along with the assertion that it would have been obvious to one skilled in the art to combine that asserted teaching of Key with Hayano to replicate the claimed invention. Applicants respectfully suggest that such an interpretation of Key is not supportable.

While Key is generally directed to call admission in a network, Applicant does not believe that a fair reading of Key's disclosure supports a construction from the limitation in question could be derived. Indeed, the specific portion of Key cited by the Office Action in respect to an asserted teaching of the first listed limitation ("determining an amount of bandwidth ...") – *i.e.*, Figure 7 and the explanation of that figure in the specification -- is simply a series of curves defining an admissions boundary for voice calls, at one extreme and video data at the other extreme for different conditions of network loading and QoS requirements. Applicants respectfully submit that nothing in the cited figure or the textual explanation thereof could reasonably be construed to show or suggest the feature of Applicants' claimed invention whereby the amount of bandwidth made available for voice calls is determined as a function of a number of non-voice admitted calls.

Similarly, the specific portion of Key cited in respect to an asserted teaching of the second cited limitation above ("updating a count of a number of voice calls ..."), is the text of the first five claims of Key. While Key's independent claim 1 is directed to the determination of a quality of service parameter as a function of a number of input variables including "the number of calls," nothing in the cited claims (or any other portion of Key) could reasonably be construed to teach or suggest Applicants' claimed feature of "updating a count of a number of voice calls currently admitted, when the admitted incoming call is a voice call."

Applicants' invention further includes a unique feature whereby a threshold parameter for "block dropping" in the presence of congestion is varied as a function of the available voice bandwidth. Each of the independent claims was amended in Applicants' prior response to include a limitation addressed to this feature. While the Office Action here concedes that this limitation is not taught or suggested by Hayano or Key, a new reference, Duault, is cited as teaching this feature, along with the assertion that it would have been obvious to one skilled in the art to combine that asserted teaching of Duault with the teaching of Hayano and Key to replicate the claimed invention. Applicants respectfully suggest that such an interpretation of Dualt is not supportable.

As a starting point, it is noted that the portion of Duault relied on by the Office Action as teaching the asserted limitation is nothing but the preamble to Duault's disclosure, and reads in its entirety"

> "The invention deals with a method and system for dynamically adjusting the communications bandwidth assigned to an audio channel connection in a high speed digital network."

Plainly, nothing in the cited text from Duault can reasonably be construed to teach Applicants' claim limitation of "dynamically varying a block-dropping threshold parameter as a function of the available voice bandwidth." Moreover, while Duault is generally addressed to bandwidth management for links carrying multiple traffic types, the idea of block dropping is simply not considered in Duault's disclosure. Certainly nothing in that disclosure could reasonably be construed to teach or suggest the idea of varying a block dropping threshold parameter as a function of available voice bandwidth.

It bears particular emphasis that the variation in the threshold parameter values according to the invention is a function of *only* the bandwidth available for voice calls -- *i.e.*, total bandwidth available on the virtual circuit minus the bandwidth allocated to non-voice calls admitted to the virtual circuit. This is an important distinction. As Applicants explained in the written description of their invention, the value of the queue-fill parameter of the block-dropping algorithms of the art pertain only to the number of voice-call packets waiting in the buffer for transmission. However, as Applicants also noted in their written description, voice-call packets are queued together with non-voice-call packets in the buffer. Thus the amount of buffer capacity available for voice-call packets varies depending on the number of non-voice-

call packets in the buffer, which is expected to be proportional to the virtual circuit bandwidth assigned to non-voice calls. By adapting the block-dropping threshold values for the buffer as a function of the bandwidth available for voice calls, the invention achieves an improved utilization of buffer capacity, and less likelihood of buffer overflow, than that of the prior art.

In the final analysis, Applicants submit that the approach of the Office Action here amounts to a finding a collection of isolated elements in disparate prior art references that collectively (and assertedly) comprise all of the elements of the claimed invention. Such an approach clearly constitutes the use of the "hindsight" provided by the Applicant's disclosure as a basis for interpreting the teaching of the prior art. That approach is clearly prohibited in U.S. patent law. See, *e.g.*, *In re Rouffet* (149 F.3d 1350, 1357 (1998): "use [by the Examiner of] the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention …would be an illogical and inappropriate process by which to determine patentability".

Moreover, while Applicants believe that the cited references fail even to provide a teaching that could lead one skilled in the art to the invention here, the rejection is also devoid of another critical factor. It is well established that a §103 obviousness rejection must include a showing of a motivation in the applied references to use the teaching of the cited combination of references in a manner to replicate the claimed invention. The Federal Circuit's discussion of the "obviousness" standard in *In re Rouffet* (*id*), is instructive in this regard.

The court stated:

> Virtually all inventions are combinations of old elements [*citations omitted*].
> Therefore an examiner may often find every element of a claimed invention in
> the prior art. If identification of each claimed element in the prior art were
> sufficient to negate patentability, very few patents would ever issue.
> Furthermore, rejecting patents solely by finding prior art corollaries for the
> claimed elements would permit an examiner to use the claimed invention itself
> as a blueprint for piecing together elements in the prior art to defeat the
> patentability of the claimed invention. Such an approach would be an illogical
> and inappropriate process by which to determine patentability.

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

Simply put, there is no teaching in Hayano, Key or Duault that could be read to suggest a modification of Hayano to provide a dynamic call admission methodology for voice band circuits, where call admission is made as a function of call type and where bandwidth available for voice is determined as a function of the number of non-voice admitted calls, nor the updating of the number a count admitted voice calls with admission of a new voice call. Accordingly, Applicants respectfully submit one skilled in the art would have found no motivation for combining those references in the manner suggested by the Office Action, and thus that the §103 rejection must fail.

All of the remaining rejected claims depend, directly or indirectly from one of the independent claims shown above to be patentable of the art of record. Accordingly, those dependent claims must also be patentable over that art. Withdrawal of the §103 rejection of all of Applicants' claims is accordingly respectfully requested.